

Docket: STEPHEN-1/CIP

HIGH GAIN WIDE RANGE ACCOMMODATING INTRAOCULAR LENS FOR IMPLANT INTO THE CAPSULAR BAG

ABSTRACT OF THE DISCLOSURE

A high gain lens system for implant into the capsular bag after removal of the natural crystalline lens. A preferred embodiment of the invention comprises a combination of a positive or convex lens and a negative or concave lens. These two lenses are spaced from one another and their relative spacing and respective focal lengths determine their combined focal length. When the lens system is inserted into the capsular bag, two opposed haptic flanges on each side, extend toward the inner radial edge of the bag adjacent the ciliary muscles. When the muscles contract, the bag is stretched thereby compressing the haptic flanges together or at least toward one another. This action cause the two lenses to separate further from each other and the increased spacing between the positive and negative lenses shortens the focal length to permit focusing of objects at near distances. On the other hand, when the muscles relax, the bag relaxes also, the haptic flanges separate and the lenses come closer together. The reduced spacing between the positive and negative lenses, increases the focal length to permit focusing of objects at far distances.